

What is claimed is:

1. A method of forming an image on a light sensitive planographic printing plate material comprising a hydrophilic support and provided thereon, a light sensitive layer containing an addition polymerizable ethylenically unsaturated monomer, a photopolymerization initiator, a polymer binder, and a sensitizing dye having an absorption maximum in the wavelength regions of from 390 to 430 nm, the minimum laser exposure amount necessary to form an image on the material being from 1.0 to 100 $\mu\text{J}/\text{cm}^2$, the method comprising the step of:

imagewise exposing the light sensitive planographic printing plate material to laser under a non-yellow safelight to form an image, the non-yellow safelight having an optical filter cutting out light with a wavelength of less than 440 nm, and satisfying the following expression:

$$0.800 \leq I/I_{700} < 1.00$$

wherein I_{700} represents a transmittance of light with a wavelength of 700 nm, and I represents a transmittance of light with a wavelength of from 440 nm to less than 700 nm.

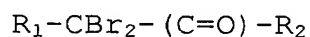
2. The method of claim 1, wherein the laser is a blue-violet semi-conductor laser emitting light with a wavelength of from 390 to 430 nm.

3. The method of claim 1, wherein the photopolymerization initiator is a monoalkyltriarylborate compound.

4. The method of claim 1, wherein the photopolymerization initiator is an iron arene complex.

5. The method of claim 1, wherein the photopolymerization initiator is a bromine-containing compound represented by the following formula 1:

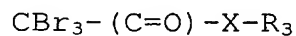
Formula 1



wherein R_1 represents a hydrogen atom, a bromine atom, an alkyl group, an aryl group, an acyl group, an alkylsulfonyl group, an arylsulfonyl group or a cyano group; and R_2 represents a monovalent substituent, provided that R_1 and R_2 may combine with each other to form a ring.

6. The method of claim 5, wherein the formula 1 is represented by the following formula 2:

Formula 2



wherein R_3 represents a monovalent substituent; and X represents $-O-$ or $-NR_4-$, in which R_4 represents a hydrogen atom or an alkyl group, provided that R_3 and R_4 may combine with each other to form a ring.

7. The method of claim 1, wherein an addition polymerizable ethylenically unsaturated monomer has a tertiary amino group in the molecule.

8. The method of claim 1, wherein an addition polymerizable ethylenically unsaturated monomer is a reaction product of a polyhydric alcohol having a tertiary amino group in the molecule, a diisocyanate compound and a compound having in the molecule a hydroxyl group and an addition polymerizable ethylenically double bond.

9. The method of claim 1, wherein the sensitizing dye is a difluoro(2-acylphenoxy)borane compound.

10. The method of claim 1, wherein the light sensitive planographic printing plate material has an overcoat layer containing a dyestuff on the light sensitive layer, the overcoat layer having an absorption maximum in the wavelength regions exceeding 420 nm, and being transparent to laser used in the imagewise exposure.